

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 23 FEB 2004

WIPO PCT

Applicant's or agent's file reference IPB/128913	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
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International application No. PCT/DK 03/00168	International filing date (day/month/year) 14.03.2003	Priority date (day/month/year) 14.03.2002
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International Patent Classification (IPC) or both national classification and IPC
B04B1/20

Applicant
ALFA LAVAL COPENHAGEN AS

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

I ☒ Basis of the opinion

II ☐ Priority

III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

IV ☐ Lack of unity of invention

V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

VI ☐ Certain documents cited

VII ☐ Certain defects in the international application

VIII ☐ Certain observations on the international application

Date of submission of the demand

08.10.2003

Date of completion of this report

20.02.2004

Name and mailing address of the international preliminary examining authority:



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**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK 03/00168

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I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-9 as published

Claims, Numbers

1-12 as published

Drawings, Sheets

1/5-5/5 as published

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
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International application No.

PCT/DK 03/00168

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	1-12
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

1. Closest Prior Art

Document DE-A1-4041868 (D1), which is also concerned with the wear reinforcement of the inlet opening for inlet of material into the drum of a centrifugal separator, is considered to represent the closest available prior art.

2. Difference

The subject-matter of claim 1 differs from that of D1, in that the wear reinforcement member of the inlet of the subject-matter of claim 1 has a quite different design than that described in D1 (in D1 it is a bush with a collar) in order to be replaced from the outside.

This said wear reinforcement member is provided with an abutment surface with a component facing tangentially opposite the back surface in abutment against an abutment surface associated with the core body, in order to be kept in place during operation.

3. Objective problem

Providing a decanter centrifuge with a wear reinforcement member which is easy to be replaced and which doesn't need special demands for securing during operation.

Since none of the available prior art documents discloses such a centrifuge with such a wear reinforcement member, the subject-matter of claim 1 can be considered both, as novel and inventive (Art.33(1)-(3) PCT).

4. Industrial application

The industrial application is obvious (Art.33(1) and (4) PCT).